DOCUMENT RESUME

ED 362 011 FL 021 432

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TITLE Conversational Analysis in Medical Settings. Annotated Bibliography.
PUB DATE 21 Aug 93
NOTE 21p.
PUB TYPE Reference Materials - Bibliographies (131)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Annotated Bibliographies; Discourse Analysis; *Helping Relationship; Interviews; Language Patterns; *Medical Evaluation; Medical Services; *Nurses; *Patients; *Physician Patient Relationship; *Physicians; Questioning Techniques; Satisfaction; Schemata (Cognition); Sociolinguistics
IDENTIFIERS *Conversational Analysis; Patient Care

ABSTRACT

Eighteen works, including summaries, are cited in this bibliography. Topics include the nature of medical encounters; power, gender, and discourse change in physician-patient interviews; women's language in the medical interview; nurses' communication with physicians; and language patterns in therapeutic change. (JP)

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CONVERSATIONAL ANALYSIS IN MEDICAL SETTINGS
ANNOTATED BIBLIOGRAPHY

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With thanks to Don McCreary, Director, Linguistics Program, UGA

Ainsworth-Vaughn, Nancy. 1992. Questions with dual functions: The `Treatment' question in medical encounters. **Medical Encounter**, 9(1), pp. 5-6.

The author begins with a brief discussion of the relationship between power and questions in general discourse. She includes a short description of the different factors that define a question--linguistic markers (Did you, Wh-), rhetorical questions, intonation, and contextual clues. She proposes that "treatment questions" (T questions) are multifunctional in the doctor-patient interview. She defines a T question as one voiced by patients which both "asks for information, but it simultaneously disputes the recommendation being made"--"Well, can't can't the, ummm, (medication name) be increased, the stuff that I'm already on..." (p. 5). A T question exploits ambiguity by reinforcing physician authority at the same time that it allows the patient to introduce suggestions or disagreement. The article is based upon her analysis of the use of treatment questions in audiotaped interactions between 8 physicians and 21 patients. Four very short excerpts from transcripts are provided as illustrations.

The author points out that most data for research on the medical encounter comes from free or low-cost clinics; the present research was undertaken in the private care setting and may demonstrate a difference balance of power because of the socioeconomic status of the patient.

FL021432

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Ainsworth-Vaughn, Nancy. 1992. Topic transitions in physician-patient interviews: Power, gender and discourse change. **Language in Society**, 21, pp. 409-426.

The author begins with a discussion of the asymmetry of power in the medical interview. She suggests that both physician gender and medical setting are variables influencing the asymmetry, and states that topic control displays social power. A section on the issues in defining topic is included; a "continuum of topic-transition activities" (reciprocal activities--links--minimal links--sudden topic changes) is provided (p. 414). Referential cohesive devices (repetition, anaphora, lexicon) and sequential ties (reference to previous discourse) are used to code topic transitions as reciprocal or unilateral.

The data is taken from transcripts of 12 medical interviews. Ainsworth-Vaughn notes that her study provides unique data: it includes transcripts of the same patient (female) interacting with two different physicians (1 male, 1 female). Excerpts from the transcripts illustrate the 4 areas of the continuum of topic transition activities. Quantitative data is also given. Ratio of reciprocal to unilateral topic transition for patients is 13.5/1,; for physicians 2.5/1. However, the ratio for reciprocal to unilateral activities for female physicians was 5/1, for male physicians 1.4/1. The author suggests that the changing demographics of the physician population in the U.S. are creating a change in medical discourse.

The literature review, discussion of difficulties in defining topic, and meticulous description of methodology produce a useful article for the discourse analyst.

Bonanno, Michelina. 1982. Women's language in the medical interview. In Robert D. Pietro, ed., **Linguistics and the professions**: Proceedings of the second annual Delaware symposium on language studies. Norwood, NJ: ABLEX, pp. 27-38.

The author analyzed transcripts of 8 physician/patient interviews for four characteristics of "women's language": the use of 1) hedges, 2) intensifying adjectives and adverbs and vagueness, 3) questions, especially tag questions and rising intonation, and 4) euphemisms. The analytical model was based on the work of George Miller. In this pilot study, Bonnano looked at only three levels of the eight-dimension model--phonology, syntax, and lexis. She provided four excerpts from the transcripts to illustrate her analysis; her results were summarized in tables. All the patients in the study were female. Of the six doctors, half were female. The author considers her research to be a pilot and the results inconclusive. However, several interesting points can be derived from the tables. Characteristics of "women's language" were used by both patients and physicians who were female. Patients used hedges with female doctors more frequently than with male and tag questions more frequently with male than with female physicians.

The study is an interesting model with the potential to be very useful if more fully developed. In particular, an analysis of what the features of women's speech, such as tag questions and hedges, actually reflects would be illuminating.

Cicourel, Aaron V. 1987. The interpenetration of communicative contexts: Examples from medical encounters. **Social Psychological Quarterly**, (50)2, pp. 217-226.

The author uses brief excerpts from transcripts of conversation between three physicians and one physician-patient interaction to illustrate the need for ethnographic as well as linguistic analysis of communication. He proposes that context is both institutional and local and conversational analysis which disregards either is inadequate: "both a broad and a local sense of context are needed even if we are dealing with single utterances" (p. 218). In fact, determining meaning apart from context is impossible. He presents the excerpt from three physicians twice, once without contextual information, once with, to support his argument. He discusses the problems of deciding what details are relevant, giving background information in this particular medical setting (a teaching hospital) as illustration. He proposes that ignoring context can lead to "frames inconsistent with the informant's everyday practices" (p. 217), as well as "trigger different expectations on the part of the reader" (p. 225).

The value of this paper to the discourse analyst is the reminder that language is a communicative tool in a particular context, and no system of analysis which ignores the unquantifiable human aspect will adequately capture the function of language.

Garvin, Bonnie J., PhD, RN, & Carol W. Kennedy, PhD, RN. 1988. Confirming communication of nurses in interaction with physicians. **Journal of Nursing Education**, 27(4), pp. 161-166.

The authors analyzed videotaped interaction between 40 nurses and physicians in a staged setting--a 30 minute joint decision-making task for which the participants were paid. Every utterance was coded according to the Confirmation-Disconfirmation Rating Instrument by a team of trained research assistants. Inter-rater reliability varied from 8.0 to 1.00 throughout the analysis.

The introductory literature review discusses the importance of communication as a part of nursing and identifies confirmation-disconfirmation theory, which is based upon work by D. Laing (1961) and Cissna & Sieburg (1981), as a model with potential to improve nursing practice. Confirming communication is verbal or nonverbal behavior that will "recognize, acknowledge and endorse another person" (p. 161); disconfirming communication will "deny or minimize the existence of the other or of a relationship with the other person" (p. 161). The authors' examples of confirming behavior include eye contact, relevant responses to statements, and acknowledgement of emotions; examples of disconfirming behavior include lack of response, topic change, and minimizing emotions. 87% of the utterances were coded as confirming. Demographic data demonstrated that older and more experienced nurses were more confirming. The authors conclude that the high confirmation rate is unexpected given the anecdotal reports of conflict between nurse and physician. This may be a result of the laboratory setting or the fact that the participants, as strangers, were more polite to each other. Clinical, not artificial, research should be conducted. The authors have published at least one other article [Kennedy, Carol W., & Bonnie J. Garvin. 1988. Nurse-physician communication. **Applied Nursing Research**, 1(3), pp. 122-127.] on the same study.

The lack of descriptive data or examples of utterances in this report is a drawback for the discourse analyst.

References

Cissna, K.N., & Sieburg, E. 1981. Patterns of interactional confirmation and disconfirmation. In C. Wilder-Mott & J.H. Weakland (Eds.) **Rigor and imagination: Essays from the legacy of Gregory Bateson**. (pp. 253-282). New York: Praeger Publishers.

Laing, D. 1961. **The self and others**. New York: Panthem.

Frankel, Richard. 1990. Talking in interviews: A dispreference for patient-initiated questions in physician-patient encounters. In George Psathas, ed., **Interaction competence**. Lanham, Maryland: University Press of America, Inc., pp. 231-262.

The author analyzed transcripts of 10 physician-patient interviews to examine the turn-taking system of the medical interview. He presents a thorough literature review to provide the reader with the necessary theory to understand the data analysis, focussing in particular on question-answer chain variants. Excerpts from the transcripts illustrate 4 types of patient initiated utterances.

1. Sequentially modified questions which are shielded from direct question force in some way by a preface*:

Pt: I wanna ask yih som'n.* (p. 241)
Dr: What's that?
[Pt question follows imbedded in anecdote*.]

2. Questions usually not in traditional question form* used by the patient asked in response to a physician request for information:

Dr: [Have you ever had] Rheumatic fever? (p. 242-243)
Pt: No, but my sister did.
Dr: All right.
Pt: I want you to know everything.*

3. Announcements* at boundaries:

Dr: So this is the one an'I'm gunnah write dat down. (p. 246)
Pt: Okay, Pt. 'hhh/let me just ask you one or two other questions cuz I've had (.) SO MANY QUESTIONS ABOUT THIS DIVERTICULITIS WHICH nobody would stop to answer for me wh'r you-hez got//me upset.*

4. Announcements* at boundaries with interruptions

Dr: Did y'feel sick. (p. 250)
(0.6)
Pt: A little bit//Ye:s]
Dr. Mmh hmh] Right. 'hh Now can yih //tell me-
Pt: An I wz very white.*
(0.6)
Dr: Pale?
Pt: Pa:le.

Frankel also discusses the different patterns and forcefulness of the multicomponent answer, an answer that contains more than one type of response (e.g., A = A + Q, A = A1 + A2).

However, in spite of the detailed look at patient attempts at topic control, Frankel concludes that the structure of the medical interview creates restrictions which limit the frequency of patient questions. He suggests that this is not to be blamed upon the individual doctor or patient but that it is an issue to be addressed in physician training.

The preliminary theoretical discussion and the detailed discussion of the transcript analysis produce a very useful model for the discourse analyst. Since many ideas are discussed with insight as appendages of the author's primary focus, this article is a particularly valuable resource.

Frankel, Richard. 1984. From sequence to sentence: Understanding the medical encounter through microanalysis. **Discourse Processes**, 7, pp. 135-170.

Frankel uses examples from a database of 400 hours of audio and videotape of physician-patient interviews to demonstrate the value of microinteractional analysis (microanalysis) in examining medical discourse. An extensive literature review begins with establishing the premise that communication is a reciprocal, culture-bound phenomenon. The paper focuses on constraints on the adjacency pair, particularly as defined in the work of H. Sacks: temporal, sequential, and overall structural constraints. Frankel states that in a previous study he determined that 99% of physician utterances were questions and the majority of patient utterances were answers. He illustrates the conversational patterns produced by the three types of constraints with excerpts from transcripts, discussing their subcategories and functions. For example, temporal constraints, according to Sacks (1972), mean that "one and only one speaker should occupy a single speaking turn" (p. 141). Frankel, however, notes that one pattern of conversation involves simultaneous speech and examines the consequences for communication in a medical context. Sequential constraints assume that the first element of an adjacency pair is the standard by which the appropriateness of the following utterance will be judged. One type of sequential restraint--sequence typing--demonstrates the connection of the adjacency pair to the broader discourse. Frankel states that "a physician's major task in the beginning of an encounter is to obtain enough information to make sound clinical judgements" (p. 157) and therefore explains the presence of certain patterns of conversation as a result of sequence typing. He also hypothesizes that the physician's cultural value--completeness--results in a specific conversational pattern. Frankel concludes that adjacency pair structure is a useful model for the analysis of communication between physician and patient, especially in the examination of "participation options" (p. 161) which ultimately influence patient care. He reiterates the value of microanalysis as a tool that incorporates, rather than disregards, cultural context.

This is a very effective theoretical argument because of the literature review, broad database, detailed methodology, and clear explanations of the author's conclusions based upon examples from transcripts.

Sacks, H. (1972, Spring). **Unpublished lecture notes**. University of California, Irvine, Lecture 1, pp. 1-26.

Fisher, Sue. 1982. The decision-making context: How doctors and patients communicate. In Robert D. Pietro, ed., **Linguistics and the professions**: Proceedings of the second annual Delaware symposium on language studies. Norwood, NJ: ABLEX, pp. 51-81.

The author presents a linguistic analysis of physician/patient interaction which focusses on the strategic use of language and is placed within social context. The research was done in two clinics in a teaching hospital. Both the social status of patients and physician purpose differed in each clinic. Fisher provided an clear description of the reality of the hospital procedures and medical treatment options. In addition, her academic literature review was concise, comprehensive, and contextualized. She included excerpts of transcripts of recorded physician/patient conversations to support her arguments. She discussed questioning strategies used by both patients and doctors, as well as physician use of presentational and persuasional strategies, relating these to patient outcome.

Fisher realizes the importance of the imbalance of power inherent in the relationship between doctor and patient and effectively demonstrates the effect of that imbalance in communication not only while it is occurring but also ultimately in patient care. While she does not cite any work by Fairclough, her hypotheses would appear to be closely related to his basic premises about language and power. One particularly illuminating case Fisher discusses involves a bilingual patient who did not understand the vocabulary the doctor used. Fisher and the physician both assumed a more technical knowledge of English on the patient's part. If Fisher had not been available as a translator, patient outcome would likely have been very different. This study is a very valuable resource for the literature review, explanation of hospital practices, and detailed analysis of conversational strategies.

McMahan, Eva M., Hoffman, Kathleen, & McGee, Gail W. (1992, November). **Nurse-physician relationships in clinical settings: A review and critique of the literature, 1966-1991**. Paper presented at the Speech Communication Annual Convention, Chicago, IL.

The authors review 25 years of published research, identifying two dominant areas of interest: 1) conflicts in ideology and role definition, and 2) the nature of nurse-physician conflict. The ideological conflict occurs because "both nurses and physicians operate within a health care culture whose ideology privileges physicians and diminishes nurses" (p. 2). The historical context for this is presented with reference to the literature. The nature of nurse-physician conflict is discussed in two subcategories, conflict resolution and communication, collaboration and teamwork.

This paper is included in this annotated bibliography for several reasons. In addition to the usefulness of the literature review, the insights of the authors provide the discourse analyst interested in medical discourse valuable context. Since only three papers actually analyze video or audiotaped communication in naturalistic settings, the review also illuminates the opportunities for research.

Phoenix, Valdemar G. and Mary L. Lindeman. 1982. Language patterns and therapeutic change. In Robert D. Pietro, ed., **Linguistics and the professions**: Proceedings of the second annual Delaware symposium on language studies. Norwood, NJ: ABLEX, pp. 3-11.

The authors propose that the context of therapeutic encounters limits the kinds of communications possible and state "manipulation of the context is one of the main tasks of the therapist" (p. 5). Using the work of Whorf on the concept of time in Standard Average European language as a base, the authors hypothesize that "the verb tenses, as context markers, will function at an out-of-awareness level and be vitally important to the therapist who wishes to deal with the overall context of the interaction" (p. 8). Four contexts are identified: history, presenting problem, transference/intervention, and resolution/termination. While it is noted that different schools of psychotherapy tend to use language and thus verb tenses in accordance with specific theoretical orientation, the premise of the article is that "therapeutic patterns using the full range of the English tense system in the appropriate context offer more choices to the client than those restricting themselves to two or three time frames" (p. 9). The clinical work of Milton H. Erickson is discussed as an example of manipulation of verb tenses resulting in successful patient outcome. One chart lists the 4 contexts and examples of verb tenses commonly used in each.

The application of Whorf's work to psychotherapy was thought-provoking; the brief discussion of the linguistic consequences of different therapeutic approaches was enlightening. However, the article would have benefitted from more examples of actual therapist/patient discourse.

Prince, Ellen, Joel Frader, and Charles Bosk. 1982. On hedging in physician-physician discourse. In Robert D. Pietro, ed., **Linguistics and the professions**: Proceedings of the second annual Delaware symposium on language studies. Norwood, NJ: ABLEX, pp. 83-97.

The authors of this study disproved their original hypothesis: physician discomfort in an ICU setting would be motivated by ethical, not medical-technical, issues. The corpus of data was a transcript of 12 hours of randomly-selected audio-taped physician interaction in a pediatric ICU. The tapes were transcribed without editing by two research assistants (D. Schiffrin and C. Ball) and reviewed by Joel Frader, one of the coauthors of the paper, who was also a staff pediatrician in the ICU. The most significant linguistic feature noted was hedging: 150 to 450 hedges occurred per hour, more than one hedge every fifteen seconds (e.g., (p. 85) "Well, I think...;" "...sort of blue...;" "at least what seemed to be..."). The authors present a summary of the types of hedges and their different purposes. They identify two basic classes: the approximator and the shield. The approximator moderates the propositional content of a statement by either "adapting a term to a non-prototypical situation" (p. 93) or by "rounding-off a representation of some figure" (p. 93). The shield represents the degree of speaker commitment to the statement by implying either plausible reasoning or attribution without direct knowledge. In a section that is placed almost as an afterthought (Self-repairs and hedging) the authors note that while the occurrence of hedges may reflect use of clichés, the frequent use of substantive repairs in physician-physician interaction, reflects the speaker uncertainty experienced by the physician. In their conclusion, the authors hypothesize that physicians may experience a violation of their own self-expectations related to the omniscience accorded them by the lay public.

The article assumes a detailed knowledge of the work of certain authors on the part of the reader, especially the work of Gazdar and "current Gricean frameworks" (p. 87). The practical introduction to the realities of a pediatric ICU is both useful and coherent. The conclusion suggests that comparable analysis of the interaction of other professionals, such as lawyers, would be valuable. The application of the reformulated hypothesis--speaker uncertainty is caused by "the medical-technical domain itself" (p. 83)--appears vague. However, the explicit description of the process of analysis used by the authors serves as a useful model.

Psathas, George. 1990. The organization of talk, gaze, and activity in a medical interview. In George Psathas, ed., **Interaction competence**. Lanham, Maryland: University Press of America, Inc., pp. 205-230.

The author analyzed a videotaped initial interview between a female student optometrist and a male patient. The primary focus of the study is on the organization and function of the gaze in relation to talk and activity, particularly the control of transition points, participant attention, and silent periods within conversation. The author provides a useful discussion of the question-answer sequence prior to presenting a detailed analysis of the interview transcript. He proposes several gaze patterns and illustrates their use. For example, a "monitoring" pattern "may be characterized as mutual gaze by speaker and hearer at the completion of speaker's utterance (line 1), a shift out of mutual gaze (produced by the next speaker) during the transition space (line 2), a continued absence of mutual gaze after next speaker's utterance (line 3), and a return to mutual gaze after next speaker's utterance completion (line 4)" (p. 214). The author concludes that visually significant activities are "interactionally relevant."

This is a significant study because it attempts to integrate nonverbal activities with verbal activities in discourse analysis. The theoretical discussion and the detailed methodology produce a very convincing paper.

Stiles, William B., PhD, Samuel E. Putnam, MD, MPH, Matthew H. Wolfe, AB, & Sherman A. James, PhD. 1979. Interaction exchange structure and patient satisfaction with medical interviews. **Medical Care**. XVII(6), pp. 667-681.

The authors analyzed transcripts of fifty-two physician-patient interviews to determine the relationship between patient satisfaction and specific types of verbal exchange. Interviews were determined to be tripartite: medical history, physical examination, and conclusion. Eight modes of verbal response, their functions, and grammatical markers were identified: disclosure (declarative "I"), question, edification (declarative third person), acknowledgement, advisement, interpretation ("you" with verb that implies attribute or ability), confirmation, and reflection ("you" with verb implying internal experience or conscious action). Utterances were coded, and factor analysis performed for each interview segment. Verbal response modes were related to values arrived at by factor analysis: patient exposition and the closed question in the medical history component; further data and physical examination in the physical examination component; final clarification, feedback and patient termination in the conclusion. Results were correlated with patient satisfaction questionnaires which had been filled out following the taped interview. The authors conclude that patient satisfaction was related to "modes that allow patients to tell their story in their own words" (p. 676) as well as modes that allowed "the physician's giving information and the patient's acknowledging receipt of this information in the conclusion segment" (p. 676). Short excerpts from the transcripts were included in an appendix.

The coding system used in this study is somewhat opaque, utilizing factor analysis. The authors refer to previous works for fuller explanations. However, the detailed framework provides a useful model for the discourse analyst.

Tannen, Deborah, and Cynthia Wallat. 1987. Interactive frames and knowledge schemas in interaction: Examples from a medical examination/interview. **Social Psychology Quarterly**, 50(2), pp. 205-216.

The authors examine the literature defining the concepts of "frame" and "schema" to arrive at working definitions in order to analyze the frame shifts caused by schema mismatches in an interaction between pediatrician/child/mother. A frame is "what is going on in interaction, without which no utterance (or movement or gesture) could be interpreted" (p. 206). The authors identify three primary frames in the interaction: the social encounter, the physical examination, and the reportage for videotaping. Schema are "participants' expectations about people, objects, events and settings in the world" (p. 207). The pediatrician and the mother have different schema concerning cerebral palsy. This "mismatch" in expectations forces the physician to shift from one frame to another during the physical examination and produces conflicting demands which are illustrated by transcript excerpts. In particular, the authors note physician register shift--from motherese with the child, to reporting for the video camera, to conversational with the mother--as evidence of frame shifting. Tannen and Wallet conclude that not only is the analysis of value in medical training, but that the model may also be furthered developed in other settings.

The literature review and detailed theoretical explanation of the authors' examination of their data produce an especially valuable resource for other researchers.

Tannen, Deborah, and Cynthia Wallat. 1982. A sociolinguistic analysis of multiple demands on the pediatrician in doctor\mother\child interaction. In Robert D. Pietro, ed., **Linguistics and the professions**: Proceedings of the second annual Delaware symposium on language studies. Norwood, NJ: ABLEX, pp. 39-50.

The authors analyze a videotaped examination of a physically and mentally handicapped child by a female pediatrician in the presence of the child's mother in order to illuminate the various communicative tasks imposed upon the physician by parental involvement in patient examination. The analysis is preceded by a short discussion of the current conflict between public opinion and the position of the medical profession concerning physicians' competence to meet patients' needs and the resulting new trends in medical research. The study follows the methodology and theory of Gumperz, Tannen, Wallet, and Green, in which analyses of taped interaction in natural settings provide the data base. The authors identify three physician audiences, each of which "requires multiple levels of functioning" (p. 43): the child, the mother, and the television camera/training audience. Excerpts from the examination are used to identify both the cognitive and social demands placed on the physician as well as specific evidence for different registers used with each audience. The three registers are related to the frame as described in Goffman (1979) and differences in "intonation, voice quality, lexical and syntactic structures, and content" (p. 45) are demonstrated.

This case study is both convincingly supported theoretically and effectively and described in detail methodologically. The section on the emotional demands imposed on the physician provides insightful information and demonstrates the authors' empathy with the pediatrician. The gender of the physician is not discussed, and another case study with a male pediatrician could be very interesting. The third audience--the camera--with its resulting register is hypothesized to provide an example of the "reporting mode" (p. 46) demonstrating the cognitive process of the trained physician in response to "his/her perception of the expectations of colleagues" (p.46). The authors conclude that more research focussing on the "mismatches due to differing experience, needs, and goals of the participants in this setting and the possibility of misunderstanding due to choice of phrasing, intonation, and other linguistic and paralinguistic clues" (p. 49) would be productive.

Goffman, Erving. 1979. Footing. Semiotica 25:1/2, 1-29.

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